Executable Naming Convention

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This document provides a set of naming conventions for FRVT 2006 submittals. All names are consistent in that they consist of a basename followed by the image type, followed by the experiment name, followed by the feature extraction mode. The basename, image type, experiment name and the feature extraction mode are separated by underscores. Basenames will be unique to each participant. Participants will receive an e-mail that specifies the basenames that they should use with all of their executables and corresponding top-level directories. In the description below, please substitute your unique base name(s) for *basename*.

Participants are NOT required to submit executables for each task. If an All Duplicate or 1-Many matching executable is submitted for a mode, then a 1-1 matching executable needs to be submitted for that mode. Mode here is either still, 3D, or 3DtoStill. If a participant plans to submit a shape only 3D executable, then they must notify the FRVT 2006 liaison which executables are shape only.

Section 1.0 provides the naming convention. Section 2.0 provides directions for submitting the executables on CD or DVD

1.1 Naming convention for *Preprocessing* executables.

Preprocessing executables that work on still images that are partially automatic only:

*basename*_Still_Preprocessing_Partialonly

Preprocessing executables that work on still images that are both partially and fully automatic:

*basename*_Still_Preprocessing_Both

1.2 Naming convention for *All Duplicate* executables.

All Duplicate executables that work on still images that are partially automatic only:

*basename*_Still_Allduplicate_Partialonly

All Duplicate executables that work on still images that are both partially and fully automatic:

*basename*_Still_Allduplicate_Both

1.3 Naming convention for *1-many matching* executables.

1.3.1 Still images

1-many matching executables that work on still images that are partially automatic only:

*basename*_Still_1toMany_Partialonly

1-many matching executables that work on still images that are both partially and fully automatic:

*basename*_Still_1toMany_Both

1.3.2 3D images

1-many matching executables that work on 3D images that are partially automatic only:

*basename*_3D_1toMany_Partialonly

1-many matching executables that work on 3D images that are both partially and fully automatic:

*basename*_3D_1toMany_Both

1.3.3 3D and Still images

1-many matching executables that work on 3D still images that are partially automatic only:

*basename*_3DtoStill_1toMany_Partialonly

1-many matching executables that work on 3D still images that are both partially and fully automatic:

*basename*_3DtoStill_1toMany_Both

1.4 Naming convention for *1-1 matching* executables.

1.4.1 Still images

1-1 matching executables that work on still images that are partially automatic only:

*basename*_Still_1to1_Partialonly

1-1 matching executables that work on still images that are both partially and fully automatic:

*basename*_Still_1to1_Both

1.4.2 3D images

1-1 matching executables that work on 3D images that are partially automatic only:

*basename*_3D_1to1_Partialonly

1-1 matching executables that work on 3D images that are both partially and fully automatic:

*basename*_3D_1to1_Both

1.4.3 3D and Still images

1-1 matching executables that work on 3D still images that are partially automatic only:

*basename*_3DtoStill_1to1_Partialonly

1-1 matching executables that work on 3D still images that are both partially and fully automatic:

*basename*_3DtoStill_1to1_Both

1.5 Naming convention for *Similarity Score Normalization* executables.

Similarity score normalization executables are matched with a 1-1 matching executables. The matching of normalization and 1-1 matching executables will be by basename and modality. The following are combinations:

1-1 Matching executable	Similarity Score Normalization Executable
*basename*_Still_1to1_Partialonly or *basename*_Still_1to1_Both	*basename*_Still_SSN
*basename*_3D_1to1_Partialonly or *basename*_3D_1to1_Both	*basename*_3D_SSN
*basename*_3DtoStill_1to1_Partialonly or *basename*_3DtoStill_1to1_Both	*basename*_3DtoStill_SSN

If multiple 1-1 matching executables are submitted, then multiple similarity score normalization will need to submitted.

1.5.1 Still images

Similarity score normalization executables that work on still images:

*basename*_Still_SSN

1.5.2 3D images

Similarity score normalization executables that work on 3D images:

*basename*_3D_SSN

1.5.3 3D and Still images

Similarity score normalization executables that work on 3D still images:

*basename*_3DtoStill_SSN

The naming conventions described in Section 1.1-1.5 are summarized in the following table

Experiment	Image Type	Feature Extraction Mode	Naming convention
Preprocessing	Still	Partially Automatic Only	*basename*_Still_Preprocessing_Partialonly
	Still	Both Partially and Fully Automatic	*basename*_Still_Preprocessing_Both
All Duplicate	Still	Partially Automatic Only	*basename*_Still_Allduplicate_Partialonly
	Still	Both Partially and Fully Automatic	*basename*_Still_Allduplicate_Both
1-many matching	Still	Partially Automatic Only	*basename*_Still_1toMany_Partialonly
	Still	Both Partially and Fully Automatic	*basename*_Still_1toMany_Both
	3D	Partially Automatic Only	*basename*_3D_1toMany_Partialonly
	3D	Both Partially and Fully Automatic	*basename*_3D_1toMany_Both
	3D-Still	Partially Automatic Only	*basename*_3DtoStill_1toMany_Partialonly
	3D-Still	Both Partially and Fully Automatic	*basename*_3DtoStill_1toMany_Both
1-1 matching	Still	Partially Automatic Only	*basename*_Still_1to1_Partialonly
	Still	Both Partially and Fully Automatic	*basename*_Still_1to1_Both
	3D	Partially Automatic Only	*basename*_3D_1to1_Partialonly
	3D	Both Partially and Fully Automatic	*basename*_3D_1to1_Both
	3D-Still	Partially Automatic Only	*basename*_3DtoStill_1to1_Partialonly
	3D-Still	Both Partially and Fully Automatic	*basename*_3DtoStill_1to1_Both
Similarity Score Normalization	Still		*basename*_Still_SSN
	3D		*basename*_3D_SSN
	3D-Still		*basename*_3DtoStill_SSN

2.0 Submission of executables

Executables must be submitted on CD or DVD. Two types of submittals are acceptable. Either your submittal must have an installation program that performs all files extractions and configurations or your submittal must be installable via direct copy of the content of your CD (or DVD) to the corresponding directory on the target platforms. In the latter case, installation should not require any additional configuration steps.

Please contact the FRVT Liaison immediately if it is impossible for you to provide your executable in one of the acceptable type. Exceptions will be considered on a case-by-case basis.

2.1 Installation Method

You must provide an installation program (or script) if setup and configuration of your submittals requires steps other than simple copying of files. In this case, each executable must have its own installation program (or script). The top level directories on the CD (or DVD) must correspond to the names of the executables as specified in Section 1 of this document. Inside of each top level directory, there should be a clearly named install executable file (e.g. install.bat, install.exe, install.sh, etc). Upon execution, this install file should copy all necessary files (executables, libraries, parameter files) to the appropriate directory on the target platform. The install file should also perform any necessary configuration. Other than execution of the install file, no additional setup should be necessary to run the executables on the target system. Your install program must be executable directly from your CD (or DVD) (i.e. the install program copies all necessary files to a user supplied directory) or it must be executed after the entire content of the CD (or DVD) is copied to the top level directory (i.e. home). There should be a readme.txt file in each directory that specifies whether the install program should be run directly from the CD (or DVD) or whether the files should be copied to the home directory prior to running the install program.

2.2 Copy directory method

In this method, participants must place all files necessary to execute their submittals in directory structures that mimic the directory structure in the *FRVT2006 Executable Calling Signature* document. Specifically, the top level directories on the CD (or DVD) must correspond to the names of the executables as specified in Section 1 of this document. There should be a /bin directory and a /lib directory directly beneath each top level directory. The content of the /bin and /lib directories will be copied to the corresponding directory on the target platform. No additional setup should be necessary to run the executables on the target system. There should also be a readme.txt in each directory that describes the contents of the directory.